

ABSTRACT OF THE DISCLOSURE

An assay for determining agonists, antagonists, or modulators for acid-sensing ion channels. The assay is especially useful for screening analgesics. The screening assay can be provided in a kit form. The assay comprises administering the composition to be screened to cells expressing acid-gated channels and then determining whether the composition inhibits, enhances, or has no effect on the channels when acid is introduced. The determination can be performed by analyzing whether a current is sustained by the cells in the presence of the composition and the acid. This current can be compared to that sustained by the FMRFamide and related peptides.